2020 / Spring Semester
Geology 506
Sequence Stratigraphy

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Department: Geology

Class meeting time and place: M 5:30 – 8:00 PM, Miller Science 323

Textbook: Principles of Sequence Stratigraphy: Octavian Cutuneau

Course Description: Sequence Stratigraphy (GOL 506) - Study of Sequence Stratigraphy and sequence stratigraphic relations and the identification, origin, distribution and correlation of sedimentary cycles:

Program Learning Outcomes:

1. Demonstrate knowledge of the fundamental core geologic concepts (Mineralogy, Petrology, Structural Geology, Stratigraphy, Geophysics and Geochemistry). (Concepts)
2. Execute geologic procedures and methods accurately, appropriately and efficiently. (Skills)
3. Apply principles of logic and reasoning to develop and analyze geologic problems. (Logical - Reasoning)
4. Demonstrate competence in using various geologic tools, including technology, to formulate, represent, and solve problems. (Critical thinking - Problem Solving)
5. Demonstrate proficiency in communicating geologic information in an appropriate form to the expected audience. (Communication)

Student Learning Outcomes:

1. Properly identify and describe stratigraphic sequences
2. Understand the different orders of cycles
3. Understand the difference between clastic and carbonate sequences
4. Recognize depositional environments within sequences
5. Work with seismic and stratigraphic data
6. Determine deposition setting from sequence stratigraphic data
7. Properly learn and use sequence stratigraphic nomenclature
**Course Requirements:** Sequence Stratigraphy (GOL 506) is designed to provide an understanding of geologic sequences in the rock record.

- Midterm Lecture Exam
- Final Exam
- Outline of each text book chapter
- Class reading presentation
- Term paper
- Term paper presentation

**Course Calendar:**

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<tr>
<th>Topic</th>
<th>Reading Assignment</th>
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<tr>
<td>No.  Topics</td>
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<tr>
<td>Sequence Stratigraphy</td>
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<tr>
<td>1. Introduction</td>
<td>1 – 17 Pages</td>
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<tr>
<td>2. Methods of Sequence Stratigraphic Analysis</td>
<td>17 – 73 Pages</td>
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<tr>
<td>3. Accommodation and Shoreline Shifts</td>
<td>73 – 105 Pages</td>
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<tr>
<td>4. Stratigraphic Surfaces</td>
<td>105 – 165 Pages</td>
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<td>5. System Tracts</td>
<td>165 – 235 Pages</td>
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<td>6. Exam 1 - Take Home</td>
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<td>7. Sequence Models</td>
<td>235 – 291 Pages</td>
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<td>8. Time Attributes of Stratigraphic Surfaces</td>
<td>291 – 327 Pages</td>
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<td>9. Hierarch of Sequence and Stratigraphic Boundaries</td>
<td>327 – 335 Pages</td>
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<td>10. Discussion and Conclusions</td>
<td>335 – 342 Pages</td>
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<td>11. Student Presentations (Final Exam Period)</td>
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<td>12. Final Exam – Take Home (Due at the Start of Final Exam Period)</td>
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Field Trip: March 27-30, 2020 – West Texas (Guadalupe National Park)

**Grading Policy:**

Calculation of final grades:

**Lecture Grade Calculation**

- Midterm Exam : __________100 points
- Final Exam : __________100 points
- Outline of Chapters ________150 points
- Reading Dis. __________100 points
- Term Paper __________100 points
- Presentation __________100 points
- Quizzes __________100 points (if given)
- Total points: __________750 points

_____ % Your Points divided by the Points Possible (Lecture %)

The course letter grade is based on Course %:

100-90% = A, 89-80% = B, 79-70% = C, 69-60% = D, 59-00% = F
Make-Up Exams:

Do not miss schedule exams unless you have a Doctor’s excuse or Dean of Students Excuse. I reserve the right to give an oral exam as a make-up. Unexcused absence = 0.

Final Exam Due: Monday, May 4, 2020

Attendance Policy:

Students are required to attend every lecture. Attendance will be monitored by unannounced quizzes, up to two per class period that will effect the course grade. If you are ill or have a university excuse contact me before class.

Academic Integrity (A-9.1)

Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

Definition of Academic Dishonesty

Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.

Please read the complete policy at http://www.sfasu.edu/policies/academic_integrity.asp

Withheld Grades Semester Grades Policy (A-54)

Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.
The circumstances precipitating the request must have occurred after the last day in which a student could withdraw from a course. Students requesting a WH must be passing the course with a minimum projected grade of C.

**Students with Disabilities**

To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to [http://www.sfasu.edu/disabilityservices/](http://www.sfasu.edu/disabilityservices/).